

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|------------|---------------------------------|--------|--|----------------|---|
| 49738 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | The antimicrobial properties of mesenchymal stromal cells as a biological alternative to antibiotics | G Van de Walle | College of Veterinary Medicine, Cornell University |
| 49754 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Prevalence and Genetic variability of resistant Rhodococcus equi in Horse-breeding Farms in Kentucky, USA | L Huber | Department of Large Animal Medicine, College of Veterinary Medicine, University of Georgia |
| 49779 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Pet Owner Knowledge of and Attitudes Toward the Judicious Use of Antimicrobials in Companion Animals | L Redding | School of Veterinary Medicine, University of Pennsylvania |
| 49815 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Characterization of multidrug resistance patterns in canine Staphylococcus pseudintermedius with machine learning | CL Cazer | Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University |
| 49887 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Psychosocial factors of Tennessee cattle producers regarding responsible antibiotic use | C Okafor | University of Tennessee |
| 50090 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | An evaluation of incidence rates and antimicrobial resistance in human Escherichia coli bloodstream infections | MC MacKinnon | Department of Population Medicine, Ontario Veterinary College, University of Guelph |
| 50124 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Effect of danofloxacin treatment on the development of fluoroquinolone resistance in Campylobacter jejuni in cattle | D Goulart | Department of Veterinary Microbiology and Preventative Medicine, Iowa State University |
| 50126 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Antimicrobial resistance in Mannheimia haemolytica isolates from the National Animal Health Laboratory Network. | B Harris | National Animal Health Laboratory Network-NVSL-USDA-APHIS |
| 50261 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Estimating on-farm antimicrobial usage in U.S. broiler chicken and turkey production | RS Singer | Mindwalk Consulting Group |
| 50267 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Effect of metaphylactic treatment of dairy calves with enrofloxacin on antimicrobial resistance in fecal E. coli | R Pereira | Department of Population Health and Reproduction, School of Veterinary Medicine, University of California- Davis |
| 50356 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Big data survey of Integrative Conjugative Elements and associated cargo genes across hundreds of bacterial genera | IB Slizovskiy | Veterinary Population Medicine Department, College of Veterinary Medicine, University of Minnesota |
| 50391 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Assessing diversity of antimicrobial resistance phenotypes and genotypes in bovine Mannheimia haemolytica isolates | HF Carter | Department of Pathobiology & Population Medicine, College of Veterinary Medicine, Mississippi State University |
| 50408 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Modeling the effect of tylosin on macrolide-resistant Enterococcus in feedlots and reducing resistance transmission | GS Stapleton | College of Veterinary Medicine, Cornell University |
| 50453 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Plasmids and genetic resistance determinants to quinolones and cephalosporins in Salmonella in United States swine | E Elnekave | University of Minnesota |
| 50483 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Antimicrobial effect of individual phenolic compounds against Campylobacter | Z Tabashum | University of Maryland |
| 50484 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Antimicrobial-resistant E. coli in Canada geese feces from public beaches in Minnesota | EA Smith | Department of Veterinary and Biomedical Sciences, College of Veterinary Medicine, University of Minnesota |
| 50491 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Salmonella sentinel for antibiotic resistant genes acquired by horizontal transfer under antimicrobial selective pressure. | T Looft | National Animal Disease Center, USDA-ARS |
| 50502 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Prevalence and antimicrobial susceptibility of Salmonella and E. coli in sheep and environment in North Carolina | NA Atlaw | Department of Population Health and Pathobiology, College of Veterinary Medicine, North Carolina State University |
| 50517 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Effects of antimicrobial drug use in beef feedlot cattle on microbiome and resistome ecology | E Doster | Colorado State University |
| 50522 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Constructing veterinary hospital antibiograms to guide antimicrobial selection for empiric therapy | A Martin | Purdue University |
| 50554 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Analysis of broiler litter resistomes during exposure to in-feed antimicrobials over successive flock cycles | B Wass | College of Veterinary Medicine, University of Minnesota |
| 50562 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Guiding antimicrobial therapy: prevalence of bacteremia in dairy calves with diarrhea | G Habing | Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University |
| 50566 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Phenotypic and genotypic characterization of Salmonella enterica serovar I 4,[5],12:i:- isolated from swine | S Gonzalez | Texas A&M University |
| 50572 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Antimicrobial resistance genes associated with mobile genetic elements in metagenomic sequencing data | JG Young | Vero Center - Texas A&M University and West Texas A&M University |
| 50573 | CRWAD 2019 | Antimicrobial Use & Resistance | Oral | Distribution of AMR genes and bacterial taxonomic composition in contents and mucosa across the GI tract of piglets | T Gaire | Department of Diagnostic Medicine and Pathobiology, College of Veterinary Medicine, Kansas State University |
| 49658 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | Predicting metritis cure as a path to reducing antimicrobial use in dairy cows | V Machado | Department of Veterinary Sciences Texas Tech University |
| 49776 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | Antimicrobial prescribing patterns of clinicians at a large animal veterinary teaching hospital | L Redding | School of Veterinary Medicine, University of Pennsylvania |
| 50138 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | Development of the PlyC endolysin as a bovine mastitis therapeutic for lactating dairy cows | DC Nelson | University of Maryland |
| 50246 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | The PlyS9 endolysin contains unique catalytic domains and is a potential therapeutic against Streptococcus suis | DC Nelson | University of Maryland |
| 50296 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | Antimicrobial resistance genes in Enterococci isolated from cattle, poultry and retail meat in Alberta, Canada | LA Rogers | Department of Ecosystem and Public Health University of Calgary |
| 50407 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | Prophylactic effect of Lactobacillus plantarum against Porcine Epidemic Diarrhea virus | H Moon | CJ Cheilchdang |
| 50514 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | The evolution of antibiotic resistance in Salmonella is dependent upon selection pressure & antibiotic class | DH Shah | Department of Veterinary Microbiology and Pathology, Washington State University |
| 50577 | CRWAD 2019 | Antimicrobial Use & Resistance | Poster | In vitro efficacy of novel antimicrobials against Staphylococcus pseudintermedius | DC Pena | Purdue University |
| 49824 | CRWAD 2019 | Biosecurity & Infection Control | Oral | A fully automated sample-to-answer POKKIT Central PCR system for detecting African Swine Fever virus in Vietnam | S Chung | GeneReach Biotechnology Corporation |
| 49831 | CRWAD 2019 | Biosecurity & Infection Control | Oral | The role of vaccination on transmission of Marek's disease virus in poultry | J Dunn | USDA ARS |
| 49879 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Prophylactically activating iNKT cells in swine does not alter the course of an influenza infection. | W Gu | University of Florida |
| 50019 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Feed mitigation evaluation for the reduction of viral survivability: A new approach. | S Dee | Pipestone Applied Research, Pipestone Veterinary Services |
| 50274 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Detection of pseudorabies virus antibody in serum and oral fluid specimens using a whole virus indirect IgG ELISA. | T Cheng | Department of Veterinary Microbiology and Preventative Medicine, Iowa State University |
| 50344 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Quantification of soy-based feed ingredient entry to the US by ocean freight shipping. | S Dee | Pipestone Applied Research, Pipestone Veterinary Services, Pipestone, MN, USA |

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|---------------|------------|--|--------|---|---------------------|--|
| 50348 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Exploring heterologous prime-boost vaccination approaches to enhance influenza control. | CLi | College of Veterinary Medicine |
| 50458 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Dietary deoxycholic acid reduces necrotic enteritis and modified bile acid composition | M Bansal | Poultry Science Department, University of Arkansas |
| 50480 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Enhancing a Sustainable Dairy Industry by Controlling Bovine Leukemia Virus | TN DeLong | Department of Animal Science, Michigan State University |
| 50493 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Efficacy of disinfectant wipes for reducing bacterial contamination on stethoscopes in a veterinary teaching hospital | BA Burgess | Department of Population Health, University of Georgia |
| 50495 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Development of a biosecurity information session for service providers in the swine industry | KM Hanley | Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University |
| 50497 | CRWAD 2019 | Biosecurity & Infection Control | Oral | Evaluating genetic variation at anti-tick vaccines to improve cattle fever tick eradication | JD Busch | Pathogen and Microbiome Institute |
| 49739 | CRWAD 2019 | Biosecurity & Infection Control | Poster | A field deployable Rapid Anaplasma Detection (RAD) kit for screening three Anaplasma species infecting livestock | BH Noden | Oklahoma State University |
| 49802 | CRWAD 2019 | Biosecurity & Infection Control | Poster | A survey of biosecurity measures applied on dairy cattle farms in Spain | FJ Dieguez | Universidade de Santiago de Compostela |
| 49852 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Tri-partite collaborative: development & validation of an on-farm, electronic disease diagnosis platform for cattle | E Vogel | Georgia Institute of Technology |
| 49867 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Killing of Staphylococcus aureus by CRISPR/Cas9-based nanoparticles | X Zhou | Department of Pathobiology & Veterinary Science, University of Connecticut |
| 50098 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Evaluation of the Cases of Brucellosis in Western Georgia. | L Derkachi | Laboratory of the Ministry of Agriculture of Georgia |
| 50104 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Development of a risk assessment tool to estimate the risk of the introduction of BVDV on dairy farms | B Benavides | Universidad de Nariño |
| 50336 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Veterinarian profiles: Discourses and practices related to biosecurity measures in dairy farms | SJ Moya | Universitat Autònoma de Barcelona (UAB) |
| 50452 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Characterization of biosecurity and infection control practices among public display aquaria | BA Burgess | University of Georgia |
| 50467 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Microbial metabolite deoxycholic acid prevents chicken necrotic enteritis as antibiotic alternative | M Abraha | Poultry Science Department, University of Arkansas |
| 50506 | CRWAD 2019 | Biosecurity & Infection Control | Poster | Purification and evaluation of Equine Herpesvirus 1 neutralizing antibodies | NA Eady | College of Veterinary Medicine, Cornell University |
| 50728 | CRWAD 2019 | Biosecurity & Infection Control | | Mycobacterial Transmission Dynamics in Agriculture: Integrating Phylogenetics, Epidemiology, Ecology, and Economics | YT Grohn | Cornell University |
| 49495 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Impact of Safflower Petals and Moringa Leaves Extracts in Experimental Hyper and Hypothyroidism in Rats | SS Abdelgayed | Cairo University |
| 49796 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Microbiota-Nourishing Immunity against Salmonella | A Baumler | University of California-Davis |
| 49881 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Host-genomic scan for total antibody response during a PRRSV outbreak in purebred sows | FM Hickmann | Department of Animal Science Iowa State University |
| 49939 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Suckling piglets have a rescuable defect in intestinal barrier repair associated with an immature enteric glial network | AL Ziegler | College of Veterinary Medicine |
| 49951 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Validation of a SNP panel for selection for ascites resistance in broilers | DD Rhoads | University of Arkansas |
| 49955 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Progesterone stimulates bovine herpesvirus 1 productive infection and reactivation from latency | C Jones | Oklahoma State University |
| 50023 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | US/UK Collaborative Project: Reassembly of cattle immune gene clusters for quantitative analysis | DM Bickhart | USDA ARS |
| 50147 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Association between vaginal microbiome and antibody response to PRRS vaccination in commercial gilts | L Sanglard | Department of Animal Science Iowa State University |
| 50186 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Susceptibility and immune response to Aeromonas salmonicida infection in Atlantic salmon farmed, wild and crosses | M Dang | Memorial University of Newfoundland |
| 50323 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Isolation and characterization of novel reassortant mammalian orthoreovirus from pigs with neurological signs | L Wang | Department of Diagnostic Medicine and Pathobiology, College of Veterinary Medicine, Kansas State University |
| 50450 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Swine viral diseases: lessons from the past, present and future | DA Benfield | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 50459 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Evaluation of live attenuated chimeric PRRSV vaccine against Korean type 2 field strains in a reproductive model | C Jeong | Chonbuk National University |
| 50460 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Elucidating the regulon of a fur-like protein in Mycobacterium avium subsp. paratuberculosis (MAP) | FM Miyagaki Shoyama | Michigan State University |
| 50509 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | The pig – A novel translational animal model for eosinophilic esophagitis | T Kaeser | North Carolina State University |
| 50521 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Metagenomic Next-Generation Sequencing reveal presence of a novel ungulate Bocaparvovirus in alpacas | D Kumar | Kansas State University |
| 50526 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Genetic parameters of disease resilience traits in wean-to-finish pigs from a natural disease challenge model | J Cheng | Iowa State University |
| 50527 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Aeromonas salmonicida infection and vaccination in lumpfish (Cyclopterus lumpus) | J Santander | Memorial University of Newfoundland |
| 50560 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Molecular dissection of the Campylobacter jejuni CadF and FlpA virulence proteins in binding to host cell fibronectin | PK Talukdar | Washington State University |
| 50570 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Within the Tick Vector: Sialome switches to Sialome Shifts and Sialome Phases | S Karim | University of Southern Mississippi |
| 50597 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Oral | Protein networks mediating airway hyper-responsiveness in pasture-associated severe equine asthma | CE Swiderski | Department of Clinical Science, College of Veterinary Medicine, Mississippi State University |
| 49765 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Genomic screens to identify causative polymorphisms accounting for Marek's disease genetic resistance in chicken | HH Cheng | USDA ARS |
| 49960 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Long-lasting changes in health and metabolic markers following maternal infection in pigs | SL Rodriguez-Zas | University of Illinois at Urbana-Champaign |
| 49962 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Prevalence, expression and activity of ArtAB toxin from bovine Salmonella Typhimurium | JK Tinker | Department of Biological Sciences, Boise State University |
| 49973 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Case study: An unusual presentation of brucellosis | A Mkrtchyan | NORK Infectious Disease Hospital |
| 50018 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Immune responses and efficacy of ballistic vaccination of Bison with Brucella abortus strain RB51 | S Olsen | National Animal Disease Center, USDA-ARS |
| 50049 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Allele specific expression in the chicken spleen transcriptome under APEC infection: US-UK collaborative research | SJ Lamont | Department of Animal Science Iowa State University |
| 50329 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Metabolism And Inflammation Predict Cardiopulmonary Disease Outcomes In Fattening Beef Cattle: Animal Model | M Thomas | Department of Animal Sciences, Colorado State University |

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| 50422 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Targeted genome editing to understand and enhance genetic resistance to <i>M. bovis</i> infection in domestic cattle | JR Bostrom | Recombinetics Inc |
| 50443 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Sequence-based typing of MHC BoLA alleles to determine BLV host resistance | C Lohr | CentralStar Cooperative |
| 50451 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | <i>Mycobacterium avium</i> ssp. <i>paratuberculosis</i> possesses MarP, essential for virulence in other pathogenic mycobacteria | EP Brenner | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 50534 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Bovine designer-platelets manufacture functional exogenous proteins | P Badjal | Department of Pathobiology & Population Medicine, College of Veterinary Medicine, Mississippi State University |
| 50540 | CRWAD 2019 | Disease Pathogenesis and Host Genomics | Poster | Characterization of presumptive dendritic cells in rainbow trout. | T Clark | College of Veterinary Medicine, Cornell University |
| 50291 | CRWAD 2019 | Nutrition | Oral | Serum vitamin concentrations as biomarkers of disease in dairy cows | JM Strickland | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 50474 | CRWAD 2019 | Nutrition | Oral | An anaerobic microbiota increases broiler chicken growth performance | M Abraha | Poultry Science Department, University of Arkansas |
| 49612 | CRWAD 2019 | Nutrition | Poster | The nutrient-sensing kinase mTOR in transition cow inflammatory dysfunction: a novel nutritional intervention target | S Mann | Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University |
| 49903 | CRWAD 2019 | Nutrition | Poster | Efficacy of colostral IgG to improve growth and health outcomes of calves shipped to a commercial rearing facility | ME Branine | Zinpro Corporation |
| 50449 | CRWAD 2019 | Nutrition | Poster | Impact of oxidative stress on vaccine responsiveness in neonatal dairy calves | W Cuervo | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 49781 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | The effect of pet ownership on the recurrence of <i>Clostridioides difficile</i> infection | L Redding | School of Veterinary Medicine, University of Pennsylvania |
| 49784 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Multidrug-resistant coagulase-negative staphylococci associated with dairy farms, abattoirs and food handlers | RD Abdi | Long Island University |
| 49841 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Retrospective study of rabies cases registered at two hospitals and community KAP in south Ethiopia | BG Donde | Addis Ababa University |
| 49859 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Clinical trials: Improving knowledge or research wastage? | JM Sargeant | Ontario Veterinary College, University of Guelph |
| 49878 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Relationships between white-tailed deer, Ixodes scapularis tick, and Lyme disease in Illinois | F Winata | University of Illinois at Urbana-Champaign |
| 49934 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Viral strain identification in field samples using nanopore MinION direct RNA sequencing | S Tan | College of Veterinary Medicine, University of Minnesota |
| 50010 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | The effects of flooding on beef cattle: a scoping review | SD Crist | College of Veterinary Medicine, University of Illinois |
| 50069 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Spatial overlap of feral & outdoor-raised pigs: potential disease transmission in the wildlife-livestock interface | L Patterson | University of California -Davis |
| 50100 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Characterizing infection trajectories of slowly progressing infectious disease using hidden Markov models | KM Ceres | Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University |
| 50119 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Prevalence of non-O157 STEC in pre- and peri-harvest cattle worldwide: A systematic review and meta-analysis | DM Valencia | Center for Outcomes Research and Epidemiology, College of Veterinary Medicine, Kansas State University |
| 50149 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | <i>Escherichia albertii</i> is an emerging zoonotic human pathogen in the United States | J Lin | Department of Animal Science, University of Tennessee |
| 50180 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Selective Dry Cow Therapy on U.S. Dairy Farms: Impact on Udder Health and Productivity | SM Rowe | Department of Veterinary Population Medicine, College of Veterinary Medicine, University of Minnesota |
| 50181 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Student focus group research to fuel improvement of didactic veterinary curriculum | CC Dodd | Kansas State University |
| 50193 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Effects of macrolides and alternatives on <i>Enterococcus faecium</i> diversity and resistance in U.S. feeder cattle | SA Murray | Department of Veterinary Pathobiology, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University |
| 50284 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Can lower-order β -lactam use in livestock over-select for higher-order β -lactamases of consequence to human health? | OJ Ogunrinu | Department of Pathobiology |
| 50297 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Randomized controlled trial evaluating the efficacy of two commercial internal teat sealants in dairy cows | SM Rowe | Department of Veterinary Population Medicine, College of Veterinary Medicine, University of Minnesota |
| 50319 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Detection of PRRSV-specific antibody in swine fecal samples | A Henao-Diaz | Department of Veterinary Diagnostic and Production Animal Medicine, Iowa State University |
| 50325 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Commercial kit vs standard overnight protocol. What works better for PRRSV OF ELISA testing? | A Henao-Diaz | Department of Veterinary Diagnostic and Production Animal Medicine, Iowa State University |
| 50412 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Flavobacterial diversity and its effect on disease in aquaculture | TP Loch | Michigan State University |
| 50419 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Interrelated measures of bovine leukemia virus disease infection and disease progression | H Hutchinson | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 50430 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Survey of cattle health and production record-keeping methods by cow-calf producers in Mississippi | WJ Jumper | College of Veterinary Medicine, Mississippi State University |
| 50437 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Alterations in fecal microbiota among cattle fed a beta-adrenergic agonist ractopamine hydrochloride or elevated zinc | F Sarwar | College of Veterinary Medicine, Texas A&M University |
| 50465 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Modeling atypical <i>Aeromonas hydrophila</i> (aAh) dynamics in catfish aquaculture ponds of the southeastern United States | BM Richardson | Mississippi State University |
| 50472 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Prevalence of Non-typhoidal Salmonella in veal calf production | SR Locke | Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University |
| 50476 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Impact of Bovine Leukemia Virus on lymphocyte counts and ELISA status across a lactation cycle in dairy cattle | C Kellogg | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 50485 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Efficacy of metaphylaxis with tulathromycin and pentavalent modified-live virus vaccination in high-risk cattle | V Munoz | West Texas A&M University |

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| 50490 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Randomized clinical trial of pain mitigation protocols for caustic paste disbudding in young dairy calves | C Winder | Department of Population Medicine, Ontario Veterinary College, University of Guelph |
| 50499 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Modeling the Effects of Antimicrobial Use Policies on Profitability of Post-Weaning Beef Production Systems | TB McMurray | Department of Pathobiology & Population Medicine, College of Veterinary Medicine, Mississippi State University |
| 50505 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Using dynamic time warping algorithms and spatiotemporal analyses of swine condemnations for syndromic surveillance | KC O'Hara | Department of Medicine & Epidemiology, School of Veterinary Medicine, University of California-Davis |
| 50524 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Performance of bacterial differential abundance tests on broiler cecal microbiome data | R Valeris-Chacin | Department of Veterinary and Biomedical Sciences, College of Veterinary Medicine, University of Minnesota |
| 50538 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Measures of transfer of passive maternal immunity and the occurrence of pneumonia in pre-weaned beef calves | AC Thompson | College of Veterinary Medicine, Mississippi State University |
| 50558 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | The effect of tylosin and DFM supplementation on Enterococcus and antibiotic resistance in the cattle feedyard | A Holbert | Texas A&M University |
| 50564 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Evaluation of foot and mouth disease vaccination strategies for the U.S. beef feedlots using mathematical modeling | T Gaire | Center for Outcomes Research and Epidemiology, College of Veterinary Medicine, Kansas State University |
| 50585 | CRWAD 2019 | Epidemiology, Population & Public Health | Oral | Influenza transmission during the pre-weaning period: are nurse sows a risk for influenza transmission in piglets? | J Garrido-Mantilla | University of Minnesota |
| 49827 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Subclinical hypocalcemia: its prevalence and effects on blood and milk production in high yielding dairy cows in Korea | Y Cho | Sunchon National University |
| 49905 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Identification of epigenetic markers predictive of late embryonic mortality in bovine milk. | K Kesler | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 49950 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Diagnostic accuracy for assessing fever of Japanese Black calves by ventral tail base surface temperature | Y Sasaki | University of Miyazaki |
| 49966 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | The prevalence of Campylobacter on farms in the United States and Canada: a systematic review and meta-analysis | M Plishka | Department of Population Medicine, Ontario Veterinary College, University of Guelph |
| 49968 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Epidemiology and brucellosis control measures in farm animals in the Geghashen community, Kotayk marz, Armenia | N Hakobyan | Food Safety Inspectorate |
| 49970 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | The distribution of small ruminant brucellosis in Armenia | T Markosyan | Scientific Center for Food Safety Risk Assessment and Analysis |
| 49991 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Development of A Milk-Based MicroRNA Assay to Stratify BLV Infectiousness in Dairy Cattle | JR Zenchak | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 50000 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Rabies control measures in Azerbaijan: survey of stray dog population in Baku in 2016 | E Hasanov | Department for Agrarian Policy Issues The Administration of the President of the Republic of Azerbaijan |
| 50101 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Importance of FMD Laboratory Studies in Georgia | K Goginashvili | Laboratory of the Ministry of Agriculture of Georgia |
| 50122 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Taking a transdisciplinary approach reveals new insights for protecting food animal health | JM Smith | Department of Animal and Veterinary Sciences, University of Vermont |
| 50258 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Improving dairy cow health monitoring and management using automated sensors | JO Giordano | Department of Animal Science, Cornell University |
| 50266 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Dry-off antibiotic use in dairy cattle to cure intramammary infections: systematic review and network meta-analysis | CK McMullen | Department of Population Medicine, Ontario Veterinary College, University of Guelph |
| 50299 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Cross-sectional study of bedding bacteria counts and intramammary infection in late lactation dairy cows | SM Rowe | Department of Veterinary Population Medicine, College of Veterinary Medicine, University of Minnesota |
| 50300 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Cross-sectional study of cloth udder towel bacteria counts and intramammary infection in late lactation dairy cows | SM Rowe | Department of Veterinary Population Medicine, College of Veterinary Medicine, University of Minnesota |
| 50305 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Phylogenetic characterization of Brucella abortus strains isolated from Korea using MLSA | J Lee | Animal and Plant Quarantine Agency |
| 50306 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Etiology of bovine brucellosis in Korea with emphasis on control strategies | J Lee | Animal and Plant Quarantine Agency |
| 50310 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Analysis of genetic characteristics and Relatedness of Brucella canis isolates from Korea using MLST assay | J Lee | Animal and Plant Quarantine Agency |
| 50346 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Incidence rates of mastitis in heifers on organic dairy farms | C Baumann | University of Minnesota |
| 50409 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Serological and molecular epidemiology of foot-and-mouth disease in cattle and pigs in commercial farms of Ethiopia | FT Woldemariam | Addis Ababa University |
| 50414 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Evaluation of an on-site blood leukocyte test for use in cattle | HC Hutchinsonson | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 50417 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Phenotypic factors affecting shelter dog euthanasia and transfer in five states | CJ Cain | College of Veterinary Medicine, Mississippi State University |
| 50431 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | BLV Super-shedders: Insights into a longitudinal field trial | KR Sporer | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 50434 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Survey of veterinary involvement in Mississippi cow-calf operations | WJ Jumper | College of Veterinary Medicine, Mississippi State University |
| 50435 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Presence and characteristics of antimicrobial resistant determinants in viable bacteria from cattle feedyard dust | IM Leon Moreno | Department of Veterinary Integrative Biosciences, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University |
| 50445 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Study of blood samples on presence of Orthopoxviruses and Brucella using rapid molecular and serological approaches | E-Khmaladze | National Center for Disease Control and Public Health/R. Lugar Center |
| 50466 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Impact of Bovine Leukemia Virus infection on disease incidence and severity in dairy cattle | B Norby | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 50498 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Clinical evidence of breed predilection for Equid Herpesvirus-1 associated myeloencephalopathy (EHM) | LS Goehring | Center of Clinical Veterinary Medicine; Ludwig-Maximilians University Munich |
| 50508 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Community research and education program to use the microbiome for the advancement of organic livestock production | C Dean | University of Minnesota |

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|------------|--|--------|--|------------------|---|
| 50525 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Evaluation of the evolution and main pathways of African Swine Fever virus (ASFV) transmission in endemic areas | B Martínez-López | Center for Animal Disease Modeling and Surveillance, University of California-Davis |
| 50532 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Impact of management decisions on bovine respiratory disease morbidity and mortality risks | SF Capik | Department of Veterinary Pathobiology, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University |
| 50536 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | Developing a predictive algorithm for bovine leukemia virus proviral load | EE John | Department of Health Management, Atlantic Veterinary College, University of Prince Edward Island |
| 50551 | CRWAD 2019 | Epidemiology, Population & Public Health | Poster | A system dynamics model to facilitate the control and eradication of brucellosis in sheep within Gansu Province, China | RW Wills | Mississippi State University |
| 49895 | CRWAD 2019 | Modeling & Statistics | Oral | Spray Irrigation with Animal Wastewater: Modeling Infection Risks and Ammonia Toxicity | J Mori | Department of Pathobiology |
| 50343 | CRWAD 2019 | Modeling & Statistics | Oral | Quantification of fenceline contacts between pens of feedlot cattle and implications for disease transmission | HL Seger | Center for Outcomes Research and Epidemiology, College of Veterinary Medicine, Kansas State University |
| 50520 | CRWAD 2019 | Modeling & Statistics | Oral | Simulation Model for infectious animal diseases in endemic regions (SMIAD-ER): a demonstration using a case of FMD | M Zaheer | Department of Clinical Sciences, Colorado State University |
| 50574 | CRWAD 2019 | Modeling & Statistics | Oral | Reproducible R functions to analyze WGS data from animals infected with multiple strains of John's disease | Y Wang | Bioinformatic and Computational Biology Program University of Minnesota |
| 50251 | CRWAD 2019 | Modeling & Statistics | Poster | Multi-model ensemble modeling for outbreaks of foot and mouth disease | LM Beck-Johnson | Department of Biology, College of Natural Sciences, Colorado State University |
| 50314 | CRWAD 2019 | Modeling & Statistics | Poster | Modeling Swine Movement Patterns and Disease Surveillance at the U.S. National Scale | CT Webb | Department of Biology, College of Natural Sciences, Colorado State University |
| 49737 | CRWAD 2019 | Immunology | Oral | Defining the immune cell atlas in equine peripheral blood by single cell RNA sequencing | G Van de Walle | College of Veterinary Medicine, Cornell University |
| 49789 | CRWAD 2019 | Immunology | Oral | Mycobacterium avium sub. paratuberculosis drives an innate Th17 response with or without antigen-presenting cells | JL DeKuijper | Department of Animal Science, Michigan State University |
| 49806 | CRWAD 2019 | Immunology | Oral | Cross-species analysis reveals molecular and functional novelty of | Y Sang | Tennessee State University |
| 49853 | CRWAD 2019 | Immunology | Oral | In vitro evaluation of vitamin E analogs as ancillary antioxidants in dairy cattle. | MJ Kuhn | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 49894 | CRWAD 2019 | Immunology | Oral | Functional characterization and phenotyping of IgE-binding monocytes in equine seasonal Culicoides hypersensitivity | EM Larson | Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University |
| 49958 | CRWAD 2019 | Immunology | Oral | Study of pig behavior later in life associated with maternal immune activation | SL Rodriguez-Zas | University of Illinois at Urbana-Champaign |
| 49965 | CRWAD 2019 | Immunology | Oral | Isolation and immortalization of PRRSV GP5 specific porcine B-cells | JE Young | Department of Veterinary and Biomedical Sciences, College of Veterinary Medicine, University of Minnesota |
| 50007 | CRWAD 2019 | Immunology | Oral | Dietary B-glucan reduces Salmonella shedding and alters monocyte phenotype | KA Byrne | National Animal Disease Center, USDA-ARS |
| 50034 | CRWAD 2019 | Immunology | Oral | IL-10-producing neutrophils in cattle | Z Xiao | Department of Animal and Avian Sciences |
| 50047 | CRWAD 2019 | Immunology | Oral | Host response in the cecum and cecal tonsil of turkey poults colonized by different Campylobacter jejuni isolates | MJ Sylte | National Animal Disease Center, USDA-ARS |
| 50093 | CRWAD 2019 | Immunology | Oral | Single-cell RNA sequencing identifies cell phenotypes and functions in porcine ileum | JE Wiarda | National Animal Disease Center, USDA-ARS |
| 50162 | CRWAD 2019 | Immunology | Oral | Examining the permeability of the piglet gut at birth and weaning and its impact on immune status | B Deluco | Vaccine and Infectious Disease Organization - International Vaccine Centre, University of Saskatchewan |
| 50198 | CRWAD 2019 | Immunology | Oral | Immune synapse formation of WC1+ $\gamma\delta$ T cells in response to Leptospira | A Gillespie | Department of Veterinary and Animal Sciences, University of Massachusetts |
| 50211 | CRWAD 2019 | Immunology | Oral | Intramammary calcitriol treatment of mastitis alters indicators of redox activity and percentage of neutrophils. | TL Williams | Department of Animal Sciences, University of Florida |
| 50217 | CRWAD 2019 | Immunology | Oral | Characterization of goat $\gamma\delta$ T cells and responses of WC1+ $\gamma\delta$ T cells to pathogens | AW Yirsaw | University of Massachusetts Amherst |
| 50228 | CRWAD 2019 | Immunology | Oral | Basophil of horses with Culicoides hypersensitivity produce IL-4 in response to allergens | F Raza | Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University |
| 50270 | CRWAD 2019 | Immunology | Oral | Genomic organization and expression of the swine WC1 multigenic array of hybrid co-receptor/PRR molecules | L Le Page | University of Massachusetts Amherst |
| 50317 | CRWAD 2019 | Immunology | Oral | Host responses at the molecular level to vaccine associated enhanced respiratory disease in swine | JD Powell | National Animal Disease Center, USDA-ARS |
| 50345 | CRWAD 2019 | Immunology | Oral | Characterization of the local and systemic immune response to Lawsonia intracellularis infection in vaccinated pigs | E Vasquez | University of Minnesota |
| 50418 | CRWAD 2019 | Immunology | Oral | Bioactivity of the endocannabinoid arachidonylethanolamide in cultured bovine endothelial cells | CC Walker | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 50433 | CRWAD 2019 | Immunology | Oral | Chitosan-Salmonella nanovaccine enhances TLRs, th1 and th2 cytokines mRNA expression in layer chicken immune cells | S Renu | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 50464 | CRWAD 2019 | Immunology | Oral | Biological Sex and Early Weaning Shape Gut Immune Development in the Pig | A Moeser | Michigan State University |
| 50475 | CRWAD 2019 | Immunology | Oral | Vaccine administered with semen during artificial insemination to promote immunity without affecting pig fertility | HL Wilson | Zoetis |
| 50488 | CRWAD 2019 | Immunology | Oral | Protein levels in the blood of young healthy pigs as indicators of disease resilience | Y Chen | Department of Animal Science Iowa State University |
| 50500 | CRWAD 2019 | Immunology | Oral | Whole blood RNA-seq analysis at arrival to identify biomarkers of respiratory disease risk in stocker cattle | MA Scott | Department of Pathobiology & Population Medicine, College of Veterinary Medicine, Mississippi State University |
| 50504 | CRWAD 2019 | Immunology | Oral | Orf virus based vectored vaccine induces protective immunity to swine influenza virus | LR Joshi | Cornell University |
| 50516 | CRWAD 2019 | Immunology | Oral | Modulation of porcine lung immune cells during PRRSV-2 infection | LS Premadasa | Department of Population Health and Pathobiology |
| 50579 | CRWAD 2019 | Immunology | Oral | Generation of pig dendritic cells from Flt3 ligand-dependent bone marrow cultures and the infection by PRRSV1. | Y Li | Universitat Autònoma de Barcelona (UAB) |
| 50584 | CRWAD 2019 | Immunology | Oral | Induction of IgM responses occurs in newly identified semi-organized lymphoid tissue of rainbow trout spleen | O Sunyer | School of Veterinary Medicine |
| 49752 | CRWAD 2019 | Immunology | Poster | Interleukin-17 as a therapeutic target to ameliorate bovine respiratory | J McGill | Department of Veterinary Microbiology and |

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|------------|--------------------------|--------|--|------------------|---|
| 49775 | CRWAD 2019 | Immunology | Poster | Developing Critical Knowledge of Intestinal Microbiota and Mucosal Immune System Influence on Early Trout Health | BC Small | University of Idaho |
| 49829 | CRWAD 2019 | Immunology | Poster | Development of poultry immune reagents | HS Lillehoj | Animal Bioscience and Biotechnology Laboratory |
| 49838 | CRWAD 2019 | Immunology | Poster | Lipid metabolism and dysfunctional inflammatory responses in periparturient cows | LM Sordillo | Department of Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University |
| 49843 | CRWAD 2019 | Immunology | Poster | Immunomodulatory functions of high density lipoproteins in a bovine mastitis model | EL Behling-Kelly | College of Veterinary Medicine, Cornell University |
| 49876 | CRWAD 2019 | Immunology | Poster | Enhancing the detection of peripheral Brucella-specific T cell responses in bison and cattle | PM Boggiatto | National Animal Disease Center, USDA-ARS |
| 49909 | CRWAD 2019 | Immunology | Poster | Characterization of protective immunity of membrane vesicles and E. coli outer membrane vesicles against Johne's disease. | YY Chang | College of Veterinary Medicine, Cornell University |
| 49933 | CRWAD 2019 | Immunology | Poster | Effects of Industrial Hemp cannabidiol on pro-inflammatory cytokine production of horses in vitro. | S Turner | University of Kentucky Gluck Equine Research Center |
| 49935 | CRWAD 2019 | Immunology | Poster | Vitamin A enhances milk IgA in gilts infected with porcine epidemic diarrhea virus and piglet lactogenic protection | L Saif | The Ohio State University |
| 49953 | CRWAD 2019 | Immunology | Poster | Improving vaccine performance with a novel phytylglycogen nanoparticle adjuvant | H HogenEsch | Department of Comparative Pathobiology, Purdue University |
| 49961 | CRWAD 2019 | Immunology | Poster | Study of inflammatory and stress indicators in offspring from PRRSV-infected gilts | SL Rodriguez-Zas | University of Illinois at Urbana-Champaign |
| 50155 | CRWAD 2019 | Immunology | Poster | LPS enhances lipolytic responses and reduces insulin sensitivity in adipose tissue from transition dairy cows | ML Chirivi | Comparative Medicine and Integrative Biology, College of Veterinary Medicine, Michigan State University |
| 50416 | CRWAD 2019 | Immunology | Poster | What 50 years of breeding has done to the ability of Holsteins to fight mastitis? | J Lippolis | National Animal Disease Center, USDA-ARS |
| 50518 | CRWAD 2019 | Immunology | Poster | Establishment and characterization of stable primary and immortalized ovine ileal epithelial cell lines. | S Bhattarai | South Dakota State University |
| 50549 | CRWAD 2019 | Immunology | Poster | Role of nasal microbiome in respiratory immunity in pigs | R Kaushik | South Dakota State University |
| 50556 | CRWAD 2019 | Immunology | Poster | Development and characterization of immune reagents for swine health, vaccine and disease studies | JK Lunney | USDA ARS BARC |
| 50578 | CRWAD 2019 | Immunology | Poster | Trained macrophages and non-target protection against Edwardsiella ictaluri and E. piscicida in channel catfish | L Petrie-Hanson | Mississippi State University |
| 49848 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Improved vaccine platforms for safe and effective control of Bovine Viral Diarrhea Virus | N Sangewar | Department Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University |
| 49855 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Immunogenicity and safety of a recombinant Rift Valley fever virus MP12 vaccine containing a two-segmented genome | S Higgs | Biosecurity Research Institute, Kansas State University |
| 49926 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Suboptimal immunity in newly hatched chickens | H Toro | Auburn University |
| 49944 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Characterization of the swine immune responses to a synthetic live-attenuated PRRSV vaccine candidate | JM Chaudhari | Nebraska Center for Virology, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln |
| 50123 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Infection and Vaccination of Sablefish (<i>Anoplopoma fimbria</i>) against atypical <i>Aeromonas salmonicida</i> | I Vasquez | Memorial University of Newfoundland |
| 50132 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Protecting Swine from the Next Pandemic: Looking Back and Looking Forward | S Khan | EpiVax, Inc. |
| 50141 | CRWAD 2019 | Vaccines and Vaccinology | Oral | PEDV T-cell epitope persistence suggests immune pressure does not act on T cell immunity | S Tan | Institute for Immunology and Informatics, University of Rhode Island |
| 50144 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Reverse vaccinology of <i>Piscirickettsia salmonis</i> , <i>Aeromonas salmonicida</i> , <i>Yersinia ruckeri</i> and <i>Moritella viscosa</i> | J Chukwu-Osazuwa | Memorial University of Newfoundland |
| 50187 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Enterobactin-specific antibodies: a novel tug-of-war weapon against Gram-negative pathogens | H Wang | Department of Animal Science, University of Tennessee |
| 50268 | CRWAD 2019 | Vaccines and Vaccinology | Oral | A Toll-like Receptor-4 agonist-based nano-vaccine delivery system for porcine influenza | H Tummala | South Dakota State University |
| 50289 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Evaluation of a chimeric influenza virus HA antigen as candidate vaccine in pregnant sow model | F Yuan | University of Illinois at Urbana-Champaign |
| 50324 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Efficacy of an intranasal vaccine containing <i>Moraxella bovis</i> and <i>Moraxella bovoculi</i> antigens against bovine pinkeye | J Angelos | Department of Veterinary Medicine and Epidemiology, University of California -Davis |
| 50446 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Viral subpopulation-based selection reveals live attenuated influenza vaccines that induce robust immune responses | A Ghorbani | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 50501 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Validation and application of B cell epitope prediction tools for porcine rotavirus A | FK Shepherd | Department of Veterinary and Biomedical Sciences, College of Veterinary Medicine, University of Minnesota |
| 50507 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Regulated lysis <i>E. piscicida</i> vaccine vector system to deliver I-antigen of <i>I. multifiliis</i> (Ich) to protect fish | B Swain | University of Florida |
| 50533 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Functional genomics of Johne's Disease: Cattle Immunity to Different Vaccines against Johne's Disease. | AM Talaat | University of Wisconsin-Madison |
| 50541 | CRWAD 2019 | Vaccines and Vaccinology | Oral | GM1-binding holotoxin structured fimbriae-toxoid MEFA of enterotoxigenic <i>Escherichia coli</i> (ETEC) for a broadly protective vaccine against porcine post-weaning diarrhea (PWD) | T Lu | Veterinary Diagnostic Laboratory College of Veterinary Medicine Kansas State University |
| 50543 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Developing a Parainfluenza Virus 5 (PIV5)-based PRRSV vaccine | F Yuan | University of Illinois at Urbana-Champaign |
| 50550 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Pre-exposed pigs as a model for <i>Chlamydia trachomatis</i> vaccine development | A Amaral | North Carolina State University |
| 50557 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Vaccine reluctance and antimicrobial use on organic dairy farms in Ohio: a producer's perspective | J Pempek | Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University |
| 50565 | CRWAD 2019 | Vaccines and Vaccinology | Oral | A Baculovirus Recombinant PEDV Spike Vaccine Enhanced PEDV replication and Diarrhea in the Vaccinated Piglets | J Yu | South Dakota State University |
| 50567 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Investigation of a universal influenza vaccine in poultry using mRNA | D Verhoeven | Department of Veterinary Microbiology and Preventative Medicine, Iowa State University |
| 50644 | CRWAD 2019 | Vaccines and Vaccinology | Oral | Development of a novel modified live avian influenza virus vaccine based on disruption of M2/M42 gene expression | DR Kapczynski | USDA-ARS |
| 49840 | CRWAD 2019 | Vaccines and Vaccinology | Poster | PARTNERSHIP: Single-cycle Replicon-based African Swine Fever Virus Subunit Vaccine | W Mwangi | Department of Diagnostic Medicine and Pathobiology, College of Veterinary Medicine, Kansas State University |

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|------------|--------------------------|--------|---|-----------------|---|
| 49842 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Efficacy of prototype live-vectored African swine fever virus vaccines | W Mwangi | Department of Diagnostic Medicine and Pathobiology, College of Veterinary Medicine, Kansas State University |
| 50142 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Enterobactin-based immune intervention to control colibacillosis in poultry | J Lin | Department of Animal Science, University of Tennessee |
| 50189 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Development of a broadly protective DIVA marker vaccine against porcine reproductive and respiratory syndrome virus | H Vu | Department of Animal Science, Nebraska Center for Virology, University of Nebraska-Lincoln |
| 50253 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Influenza viral vector B.abortus vaccine provides a prolonged protection against B.melitensis infection in ruminant | A Mailybayeva | Research Institute for Biological Safety Problems |
| 50254 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Novel influenza viral vector based human brucellosis vaccine: development of the final vaccine formulation | A Mailybayeva | Research Institute for Biological Safety Problems |
| 50561 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Investigation of a universal influenza vaccine in swine using equine HA | D Verhoeven | Iowa State University |
| 50576 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Nature's adjuvant: The evolutionary conserved role of complement component 3d in enhancing B-cell responses | E Bromage | University of Massachusetts |
| 50672 | CRWAD 2019 | Vaccines and Vaccinology | Poster | Development of an improved bovine respiratory syncytial virus vaccine. | SK Samal | Virginia-Maryland College of Veterinary Medicine |
| 49767 | CRWAD 2019 | Microbiology | Oral | Determining the role of Marek's disease virus UL13 protein kinase in horizontal transmission | KW Jarosinski | College of Veterinary Medicine, University of Illinois |
| 49782 | CRWAD 2019 | Microbiology | Oral | Development of a novel class of anthelmintics that cure gastrointestinal nematode parasites | R Aroian | University of Massachusetts Medical School |
| 49856 | CRWAD 2019 | Microbiology | Oral | Antibiotic-free alternatives to improve health and performance in commercial turkeys: genomic insights | TJ Johnson | University of Minnesota |
| 49865 | CRWAD 2019 | Microbiology | Oral | Exploring evolutionary shifts from Salmonella Mbandaka to Lubbock serotypes in U.S. High Plains feedlot cattle. | G Levent | Department of Veterinary Pathobiology, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University |
| 49886 | CRWAD 2019 | Microbiology | Oral | Factors associated with seroprevalence of Anaplasma marginale in Mississippi cattle | C Okafor | University of Tennessee |
| 49910 | CRWAD 2019 | Microbiology | Oral | Modulating microbiota and metabolome to reduce Campylobacter jejuni colonization in chickens | AM Almansour | University of Arkansas |
| 49931 | CRWAD 2019 | Microbiology | Oral | Discovery of TYR and DGA metabolic pathways and development of novel anti-nutritional strategy to impair TYR and DGA nutritional adaptation of Salmonella | R Konrad Burin | Washington State University |
| 49936 | CRWAD 2019 | Microbiology | Oral | Cellular pioneer transcription factors regulate bovine herpesvirus 1 gene expression following stressful stimuli | C Jones | Oklahoma State University |
| 49948 | CRWAD 2019 | Microbiology | Oral | Porcine dermatitis and nephropathy syndrome in Russia: a case-report | S Raev | Federal State Budget Scientific Institution Federal Scientific Centre VIEV |
| 49988 | CRWAD 2019 | Microbiology | Oral | Development of Invivo procedure for mentoring of the respiratory tract pH of normal and influenza infected animals | FA Okda | National Research Center |
| 49995 | CRWAD 2019 | Microbiology | Oral | Role of EHV-1 proteins for establishment of viremia and infection of CNS endothelia | W Azab | Institut für Virologie, Zentrum für Infektionsmedizin - Robert von Ostertag-Haus, Freie Universität Berlin |
| 49998 | CRWAD 2019 | Microbiology | Oral | Biosurveillance of Schmallenberg disease in Azerbaijan in 2012-2017 | SK Zeynalova | National Research Center |
| 50071 | CRWAD 2019 | Microbiology | Oral | Genetic analysis and pathogenicity in mice and pigs of H1N2 influenza viruses isolated from Korean pigs in 2018 | Y Jang | Chungnam National University |
| 50128 | CRWAD 2019 | Microbiology | Oral | Comparative genomic analysis of Vibrio anguillarum isolated from infected Cyclopterus lumpus in Newfoundland. | I Vasquez | Memorial University of Newfoundland |
| 50134 | CRWAD 2019 | Microbiology | Oral | Role of riboflavin synthase duplication in Aeromonas salmonicida pathogenesis in Cyclopterus lumpus | H Gnanagobal | Memorial University of Newfoundland |
| 50135 | CRWAD 2019 | Microbiology | Oral | Identification of host proteins that interact with non-structural proteins-1 α and -1 β of prrsv-1 | S Riccio | University of Liverpool |
| 50153 | CRWAD 2019 | Microbiology | Oral | Repeatability of open reading frame 5 sequencing for PRRSV at different concentrations | N Streauslin | Department of Veterinary Microbiology and Preventative Medicine, Iowa State University |
| 50160 | CRWAD 2019 | Microbiology | Oral | Phaeobacter inhibens protects oyster larvae against bacterial infection via four disparate mechanisms of action | DC Rowley | University of Rhode Island |
| 50164 | CRWAD 2019 | Microbiology | Oral | Progress toward integrating the dynamics of gut and respiratory microbiota into poultry health | K Taylor | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 50199 | CRWAD 2019 | Microbiology | Oral | Development of a bespoke PRRSV genomic toolkit | DC Schroeder | College of Veterinary Medicine, University of Minnesota |
| 50262 | CRWAD 2019 | Microbiology | Oral | Genomic characterization of Salmonella Dublin recovered from cattle in Ohio | GG Habing | The Ohio State University |
| 50278 | CRWAD 2019 | Microbiology | Oral | First isolation and in vivo characterization of porcine circovirus 3 | J Mora-Diaz | Department of VDPAM, Iowa State University |
| 50287 | CRWAD 2019 | Microbiology | Oral | Risk factors and occurrence of Brucella canis within selected provinces of South Africa. | J Oosthuizen | Department of Agriculture and Animal Health |
| 50288 | CRWAD 2019 | Microbiology | Oral | 16S Analysis of the Microbiome of Recycled Bedding Sand | H Pilch | University of Wisconsin-Madison |
| 50309 | CRWAD 2019 | Microbiology | Oral | Localizing Equid Herpesvirus 1 in various neural and lymphatic tissues at 30 and 70 days post-infection | KS Giessler | Ludwig Maximilians University |
| 50316 | CRWAD 2019 | Microbiology | Oral | Metagenomic MiniION-based sequencing of cultured RNA viruses | JB Stanton | Department of Pathology, University of Georgia |
| 50347 | CRWAD 2019 | Microbiology | Oral | Towards novel acaricide development against cattle fever tick: GPCR target validation by RNAi and chemical leads | PV Pietrantonio | TAMU |
| 50353 | CRWAD 2019 | Microbiology | Oral | Clinical trial to test efficacy of COWP in lowering GIN egg numbers in adult alpacas | MC Wright | University of Tennessee |
| 50425 | CRWAD 2019 | Microbiology | Oral | Evolutionary diversification of clade 1A.3.3.3 H1 swine influenza A viruses and zoonotic risk in the United States | TK Anderson | National Animal Disease Center, USDA-ARS |
| 50429 | CRWAD 2019 | Microbiology | Oral | Whole genome sequencing of PRRSV lead to a better classification of clinical cases. | C Lalonde | Swine and poultry infectious disease research center |
| 50442 | CRWAD 2019 | Microbiology | Oral | Application of pathogen-specific biomarkers to enhance specificity of bovine TB diagnosis | S Hadi | Michigan State University |
| 50454 | CRWAD 2019 | Microbiology | Oral | Fecal prevalence of the top-7 Shiga Toxin-Producing Escherichia coli in finisher pigs | RG Amachawadi | Kansas State University |
| 50455 | CRWAD 2019 | Microbiology | Oral | Specialist and generalist viruses in Pacific salmon of the Northwest | MK Purcell | US Geological Survey, Western Fisheries Research Center |

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|------------|--------------|--------|---|---------------------|--|
| 50469 | CRWAD 2019 | Microbiology | Oral | Development of multiplex qPCR assays for simultaneous detection of parapox, capripox and foot and mouth disease | A Das | USDA APHIS |
| 50470 | CRWAD 2019 | Microbiology | Oral | Immunomodulatory effect of butyrate on chicken macrophage cell line in presence of Salmonella Enteritidis | A Gupta | Poultry Science Department, University of Arkansas |
| 50479 | CRWAD 2019 | Microbiology | Oral | Invasive and non-invasive methods of sampling the chicken respiratory microbiota | M Abundo | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 50494 | CRWAD 2019 | Microbiology | Oral | Characterization of homologous protective humoral immunity against Seneca Valley virus | H Kim | Department of Veterinary Diagnostic and Production Animal Medicine, Iowa State University |
| 50496 | CRWAD 2019 | Microbiology | Oral | Evolutionary lineages of Escherichia coli O157:H7 are distinguished by prophage content and Stx2 production | E Stanton | University of Wisconsin-Madison |
| 50512 | CRWAD 2019 | Microbiology | Oral | Lung microRNA expression and microbiota changes in dairy calves following induced Pasteurella multocida infection | SM Raabis | University of Wisconsin-Madison |
| 50519 | CRWAD 2019 | Microbiology | Oral | A novel live attenuated vaccine protects against heterologous Senecavirus A challenge | DG Diel | Cornell University |
| 50523 | CRWAD 2019 | Microbiology | Oral | Identification of the risks of emerging flavobacteria to farmed salmonids towards improved prevention and control | TP Loch | Michigan State University |
| 50539 | CRWAD 2019 | Microbiology | Oral | Serotyping and Multilocus Sequence Typing as approaches for predicting pathotype of Streptococcus suis in the U.S. | AA Estrada | College of Veterinary Medicine, University of Minnesota |
| 50548 | CRWAD 2019 | Microbiology | Oral | Identification and characterization of the putative PEDV receptor-binding domain | M Bhandari | Iowa State University |
| 50555 | CRWAD 2019 | Microbiology | Oral | Virulence-associated gene profiling of Streptococcus suis in the United States | AA Estrada | College of Veterinary Medicine, University of Minnesota |
| 50575 | CRWAD 2019 | Microbiology | Oral | Mycoplasma bovis-associated otitis media in calves and sample sites evaluation utilizing a real-time PCR assay | K Clothier | California Animal Health and Food Safety Lab, University of California-Davis |
| 50580 | CRWAD 2019 | Microbiology | Oral | Comparison of chlortetracycline and oxytetracycline treatment regimens to clear bovine anaplasmosis | KE Reif | Kansas State University |
| 50581 | CRWAD 2019 | Microbiology | Oral | Maintenance of distinct Anaplasma marginale genotypes in different herds within the same beef cattle operation | KE Reif | Kansas State University |
| 49684 | CRWAD 2019 | Microbiology | Poster | Rational design of attenuated vaccines for porcine epidemic diarrhea virus | Q Wang | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 49710 | CRWAD 2019 | Microbiology | Poster | Isolation of Brucella abortus biotype 3 from cattle in Azerbaijan in 2012 - 2014 | A Asgarova | Azerbaijan Food Safety Institute |
| 49711 | CRWAD 2019 | Microbiology | Poster | Laboratory evaluation of skin samples and ears of farm animals in Azerbaijan in 2008-2018 | I Azimov | Central Veterinary Laboratory |
| 49729 | CRWAD 2019 | Microbiology | Poster | Molecular attenuation mechanisms of porcine epidemic diarrhea virus in pigs | Q Wang | Food Animal Health Research Program, Department of Veterinary Preventative Medicine, The Ohio State University |
| 49766 | CRWAD 2019 | Microbiology | Poster | The role of the conserved alpha herpesvirus glycoprotein C in host-to-host transmission | KW Jarosinski | College of Veterinary Medicine, University of Illinois |
| 49805 | CRWAD 2019 | Microbiology | Poster | Novel viral vaccine vectors for cattle | S Khatiwada | Department of Pathobiology, University of Illinois Champaign-Urbana |
| 49817 | CRWAD 2019 | Microbiology | Poster | The novel laboratory method rRT-PCR diagnostics to investigate peste des petits ruminants (PPR) in Georgia | N Vepkhvadze | Laboratory of the Ministry of Agriculture of Georgia |
| 49826 | CRWAD 2019 | Microbiology | Poster | Bacterial etiology of bovine digital dermatitis in dairy cattle using high throughput sequencing | Y Cho | Sunchon National University |
| 49885 | CRWAD 2019 | Microbiology | Poster | Seroprevalence of Anaplasma marginale in Georgia cattle | B Whitlock | Department of Large Animal Clinical Sciences |
| 49919 | CRWAD 2019 | Microbiology | Poster | Detection of severe fever with thrombocytopenia syndrome virus from horses in Korea | J Chae | Laboratory of Veterinary Internal Medicine College of Veterinary Medicine Seoul National University |
| 49927 | CRWAD 2019 | Microbiology | Poster | BVDV compromises fetal immune organ development leading to post-natal predisposition to secondary infections | HM Georges | College of Veterinary Medicine and Biomedical Sciences, Colorado State University |
| 49937 | CRWAD 2019 | Microbiology | Poster | Host factors in the replication of porcine respiratory and reproductive syndrome virus and swine influenza virus | Y kim | Kansas State University |
| 49938 | CRWAD 2019 | Microbiology | Poster | Investigation of Host Genetic Role in PCV2 and PRRSV Susceptibility | DC Ciobanu | Animal Science Department, University of Nebraska-Lincoln |
| 49996 | CRWAD 2019 | Microbiology | Poster | Further characterization and resolution of poly-microbial biofilms in bovine respiratory disease | TJ Inzana | NY |
| 50015 | CRWAD 2019 | Microbiology | Poster | The role of small RNAs and Hfq in regulation of Histophilus somni virulence factors | TJ Inzana | Long Island University |
| 50082 | CRWAD 2019 | Microbiology | Poster | Revealing interaction between epithelial cell and macrophage in Brucella canis infection by transcriptomic analysis | W Park | Seoul National University |
| 50084 | CRWAD 2019 | Microbiology | Poster | Detection of Sindbis virus in South-eastern part of Azerbaijan | Z Ramazanov | Azerbaijan Republic Anti-Plague Station |
| 50205 | CRWAD 2019 | Microbiology | Poster | Role of Cold Shock Proteins in Aeromonas salmonicida subsp. salmonicida Endogenous Mutagenesis and Virulence. | J Santander | Memorial University of Newfoundland |
| 50240 | CRWAD 2019 | Microbiology | Poster | Major risk factors allowing further spread of brucella infection in Egypt | HI Hosein | College of Veterinary Medicine, Beni-Suef University |
| 50245 | CRWAD 2019 | Microbiology | Poster | Investigation of Brucella spp. recovered from ruminants using Multiple Locus VNTR Analysis | A Menshawy | College of Veterinary Medicine, Beni-Suef University |
| 50252 | CRWAD 2019 | Microbiology | Poster | Manipulation of the Dermacentor andersoni microbiome to mitigate pathogen transmission | KA Brayton | Washington State University |
| 50279 | CRWAD 2019 | Microbiology | Poster | Combined immunomodulation and anti-viral therapy for Bovine Respiratory Syncytial Virus Infection | LJ Gershwin | University of California -Davis |
| 50286 | CRWAD 2019 | Microbiology | Poster | Detection of Chlamydia abortus in sheep colostrum and milk | MG Martinez Serrano | Doctorado en Ciencias de la Producción y de la Salud Animal-FMVZ-UNAM |
| 50308 | CRWAD 2019 | Microbiology | Poster | Evaluation of ELISA using combined recombinant proteins of Brucella canis for canine brucellosis | J Lee | Animal and Plant Quarantine Agency |
| 50334 | CRWAD 2019 | Microbiology | Poster | Monoclonal antibodies and immune serum from Theileria equi inoculated horses inhibit merozoite infectivity. | RH Mealey | Veterinary Microbiology and Pathology, Washington State University |
| 50350 | CRWAD 2019 | Microbiology | Poster | Characterizing the effect of temperature on bluetongue virus reassortment in Culicoides sonorensis | M Carpenter | Microbiology, Immunology, and Pathology Department, Colorado State University |

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|------------|---------------------------|--------|---|---------------------|---|
| 50360 | CRWAD 2019 | Microbiology | Poster | Genetic analysis of bovine viral diarrhea virus in pre-weaned native Korean calves | K Choi | Department of Animal Science and Biotechnology College of Ecology and Environmental Science Kyungpook National University |
| 50393 | CRWAD 2019 | Microbiology | Poster | Comparative genomics of plasmid-bearing <i>Staphylococcus aureus</i> strains isolated from various retail meats | MK Fakhr | University of Tulsa |
| 50401 | CRWAD 2019 | Microbiology | Poster | Evaluation of the safety and efficacy of an attenuated live vaccine based on highly virulent genotype 2b PEDV | G Jang | Kyungpook National University |
| 50402 | CRWAD 2019 | Microbiology | Poster | Functional characterization and proteomic analysis of the accessory protein NS7 of porcine deltacoronavirus (PDCoV) | J Park | Kyungpook National University |
| 50410 | CRWAD 2019 | Microbiology | Poster | Effect of porcine circovirus and swine influenza virus co-infections on their in vitro viral pathogenesis | Y Burgher | Faculty of Veterinary Medicine, University of Montreal |
| 50426 | CRWAD 2019 | Microbiology | Poster | Immune response conferred by <i>Brucella melitensis</i> recombinant proteins in goats | MA De la Rosa Ramos | Laboratorio de Investigación en Brucelosis Bovina, Departamento de Microbiología e Inmunología, Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional Autónoma de México |
| 50432 | CRWAD 2019 | Microbiology | Poster | Q Fever Seroprevalence Study among Farmers and Farm Animals in | LN Malania | National Center for Disease Control and |
| 50436 | CRWAD 2019 | Microbiology | Poster | Genetic Characterization and Comparative Genome Analysis of <i>Brucella</i> Isolates from Georgia | KS Sidamonidze | National Center for Disease Control and Public Health/R. Lugar Center |
| 50438 | CRWAD 2019 | Microbiology | Poster | Characterization of a novel human seasonal H3 influenza A virus spillover endemic in US swine | A Sharma | Department of VDPAM, Iowa State University |
| 50457 | CRWAD 2019 | Microbiology | Poster | Environmental and Ecological Impact on the Distribution of Anthrax in Georgia | I Burjanadze | National Center for Disease Control and Public Health/R. Lugar Center |
| 50461 | CRWAD 2019 | Microbiology | Poster | Isolation and identification of <i>Brucella</i> species from patients by biochemical and serological methods | E Jhorjholiani | National Center for Disease Control and Public Health/R. Lugar Center |
| 50471 | CRWAD 2019 | Microbiology | Poster | Effect of <i>Salmonella enterica</i> ser. Enteritidis and Heidelberg Infection on Cecal Tonsil Regulatory T Cell Properties | R Selvaraj | University of Georgia |
| 50477 | CRWAD 2019 | Microbiology | Poster | Molecular characterization of complete genome of newly emerging avian reovirus in 2016-2017 in Quebec, Canada | CA Gagnon | Faculty of Veterinary Medicine, University of Montreal |
| 50489 | CRWAD 2019 | Microbiology | Poster | Alteration of gut microbiota following treatment of bovine respiratory disease with Danofloxacin in beef calves | AF Beyi | College of Veterinary Medicine, Iowa State University |
| 50492 | CRWAD 2019 | Microbiology | Poster | Prevalence and antimicrobial susceptibilities of bacterial pathogens in Chinese pig farms from 2013 to 2017 | B Zhang | Huazhong Agricultural University |
| 50503 | CRWAD 2019 | Microbiology | Poster | Identification of peptides screened by phage display for the serological diagnosis of <i>Brucella melitensis</i> | S Villaseñor Orozco | Laboratorio de Investigación en Brucelosis Bovina, Departamento de Microbiología e Inmunología, Universidad Nacional Autónoma de México |
| 50510 | CRWAD 2019 | Microbiology | Poster | Phosphoethanolamine methyltransferases inhibitors with broad-spectrum anthelmintic effect for livestock nematodes | WH Witola | University of Illinois at Urbana-Champaign |
| 50513 | CRWAD 2019 | Microbiology | Poster | Development of swine and bovine cell lines deficient in the Neu5Gc9Ac expression to influenza D virus replication | T Uprety | South Dakota State University |
| 50515 | CRWAD 2019 | Microbiology | Poster | Investigating the role of methionine production impact on <i>C. jejuni</i> luxS mutants ability to colonize chickens | BS Ruddell | Iowa State University |
| 50528 | CRWAD 2019 | Microbiology | Poster | Interaction of classical swine fever virus Npro and interferon regulatory factor 3 | K Choi | University of Texas Medical Branch |
| 50529 | CRWAD 2019 | Microbiology | Poster | Control strategies for virulent <i>Aeromonas hydrophila</i> in catfish aquaculture by vaccination and informing pond management | ML Lawrence | Mississippi State University |
| 50530 | CRWAD 2019 | Microbiology | Poster | Use of Chimeric Eastern Equine Encephalitis Virus in an IgM ELISA for Diagnosis of EEE Infection in Horses | KK Shanmuganatham | National Animal Health Laboratory Network-NVSL-USDA-APHIS |
| 50535 | CRWAD 2019 | Microbiology | Poster | Metabolites produced by <i>Lactobacillus</i> inhibit growth and alter the virulence of enterohemorrhagic <i>E. coli</i> | A Aditya | University of Maryland |
| 50537 | CRWAD 2019 | Microbiology | Poster | Bovine respiratory disease (BRD) pathogens affect each other during co-infection | CA Cowick | Mississippi State University |
| 50544 | CRWAD 2019 | Microbiology | Poster | Genotyping of isolates of <i>Chlamydia</i> spp. obtained from abortions in ruminants of Mexico | MM Limón González | Doctorado en Ciencias de la Producción y de la Salud Animal-FMVZ-UNAM |
| 50545 | CRWAD 2019 | Microbiology | Poster | Developing qPCR assays to identify and characterize pathogens causing canine skin and soft tissue infections | BL Lunt | Zoetis |
| 50559 | CRWAD 2019 | Microbiology | Poster | Isolates of <i>Chlamydia abortus</i> in goat herds with and without tetracycline treatment in Guanajuato, Mexico | MM Limón González | Doctorado en Ciencias de la Producción y de la Salud Animal-FMVZ-UNAM |
| 50569 | CRWAD 2019 | Microbiology | Poster | Prospective Study of Epizootic Hemorrhagic Disease Virus and Bluetongue Virus Transmission in Captive Ruminants | L Foil | LSUAgCenter |
| 50582 | CRWAD 2019 | Microbiology | Poster | Comparison of multiple chlortetracycline regimens to control anaplasmosis by diverse <i>Anaplasma marginale</i> strains | B Skinner | Kansas State University |
| 50583 | CRWAD 2019 | Microbiology | Poster | Performance of Dermacentor andersoni ticks fed on calves immunized with denatured tick antigen preparations | RW Stich | University of Missouri |
| 50594 | CRWAD 2019 | Microbiology | Poster | Utility of Environmental Samples for AIV Surveillance in Commercial Poultry Operations | S Azeem | Department of VDPAM, Iowa State University |
| 50094 | CRWAD 2019 | Pathogen-Host Interaction | Oral | Identification of host-adaptation genes in extraintestinal pathogenic <i>Escherichia coli</i> during infection in different hosts | H Zhang | Department of VDPAM, Iowa State University |
| 50230 | CRWAD 2019 | Pathogen-Host Interaction | Oral | Intramammary endotoxin challenge elicits time-dependent local and systemic effects on lactating bovine mammary glands. | F Zhao | Department of Animal and Veterinary Sciences, University of Vermont |
| 50456 | CRWAD 2019 | Pathogen-Host Interaction | Oral | Genomic characterization of PRRSV-1 infection in pulmonary innate immune cells | E Crisci | Comparative Medicine Institute- North Carolina State University- Raleigh- NC- USA |
| 49780 | CRWAD 2019 | Pathogen-Host Interaction | Poster | Gut microbiome features associated with <i>Clostridioides difficile</i> colonization in puppies | L Redding | School of Veterinary Medicine, University of Pennsylvania |
| 49976 | CRWAD 2019 | Pathogen-Host Interaction | Poster | The host cell target proteins for the <i>Edwardsiella ictaluri</i> type III secretion system effectors EseL/M | RL Thune | and Louisiana State University Agricultural Center |
| 50013 | CRWAD 2019 | Pathogen-Host Interaction | Poster | Characterization of the respiratory microbiome and virome associated with bovine respiratory disease complex | TG McDanel | U. S. Meat Animal Research Center, USDA-ARS |
| 50140 | CRWAD 2019 | Pathogen-Host Interaction | Poster | Underlying mechanisms for selected disease resistance and enhanced non-specific resistance in rainbow trout | TL Welker | USDA ARS |
| 50362 | CRWAD 2019 | Pathogen-Host Interaction | Poster | Augmentation of antiviral immunity by inoculation of bovine upper respiratory epithelium with non-cytotoxic <i>H. somni</i> | LJ Gershwin | University of California -Davis |
| 50486 | CRWAD 2019 | Pathogen-Host Interaction | Poster | In vitro and in vivo analysis of a comprehensive <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> mutant bank | RG Barletta | University of Nebraska-Lincoln |
| 50571 | CRWAD 2019 | Pathogen-Host Interaction | Poster | A Pioneering Approach to Tick Control: Anti-tick Toxins Delivered via Transfected <i>Babesia bovis</i> . | M Ueti | USDA-ARS |

| Submission ID | Program | Topics | Format | Title | Presenter | Affiliation |
|---------------|-------------------|--|--------|---|------------------|--|
| 50591 | NA PRRS Symposium | Disease Pathogenesis and Host Genomics | Oral | PRRSV-infected fetuses show evidence of hypoxia and apoptosis | CM Malgarin | Large Animal Clinical Sciences, Western College of Veterinary Medicine, University of Saskatchewan |
| 50421 | NA PRRS Symposium | Microbiology | Oral | Characterization of PRRSV1 transmission routes in an endemic farm identifies conserved phylogenetic clusters | H Cilverd | Department of Animal Health and Anatomy |
| 50547 | NA PRRS Symposium | Microbiology | Oral | Single-cell RNA-sequencing to identify transcriptional signatures in a PRRSV persistent cell line | K Lim | Iowa State University |
| 50448 | NA PRRS Symposium | Modeling & Statistics | Oral | Effect of Genotype at a GBP-5 Marker on Resilience to a Polymicrobial Natural Disease Challenge in Pigs | RL Jeon | Department of Animal Science Iowa State University |
| 50424 | NA PRRS Symposium | Pathogen-Host Interaction | Oral | Local immune responses play a vital role in PRRSV clearance from infected pigs | S Nazki | College of Veterinary Medicine |
| 50444 | NA PRRS Symposium | Vaccines and Vaccinology | Oral | Deletion in African swine fever virus produced complete attenuation and protection against challenge | DP Gladue | Plum Island Animal Disease Center |
| 49882 | NA PRRS Symposium | Disease Pathogenesis and Host Genomics | Poster | Accuracy of genomic prediction for total antibody response in purebred sows during a PRRS outbreak | FM Hickmann | Department of Animal Science Iowa State University |
| 50330 | NA PRRS Symposium | Epidemiology, Population & Public Health | Poster | Influence of technician on PRRSV OF ELISA test results | L Gimenez-Lirola | Iowa State University Veterinary Diagnostic Laboratory |
| 50473 | NA PRRS Symposium | Epidemiology, Population & Public Health | Poster | Tonsil scrapings as a use for porcine reproductive and respiratory syndrome detection in growing pig populations | HL Walker | Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University |
| 49949 | NA PRRS Symposium | Microbiology | Poster | Complete genome of a "Russian group" isolate of subtype 1 PRRSV-1 is different from the "classic" PRRSV-1 strains. | A Yuzhakov | Federal State Budget Scientific Institution Federal Scientific Centre VIEV |
| 50151 | NA PRRS Symposium | Microbiology | Poster | Vaginal microbiome of PRRS-vaccinated gilts differs between animals with high and low farrowing performance | L Sanglard | Department of Animal Science Iowa State University |
| 50398 | NA PRRS Symposium | Microbiology | Poster | Assessment of the protective efficacy of a cold-adapted attenuated genotype 2b PEDV | G Jang | Kyungpook National University |
| 50406 | NA PRRS Symposium | Microbiology | Poster | Genotypic and phenotypic characteristics of novel emerging lineage 1 PRRSV nsp2 deletion variants in South Korea | J Park | Kyungpook National University |
| 50468 | NA PRRS Symposium | Microbiology | Poster | Expression attenuation of proinflammatory cytokines by NF- κ B activation and type I IFN suppression-negative PRRSV | J Kim | College of Veterinary Medicine, University of Illinois |
| 50531 | NA PRRS Symposium | Microbiology | Poster | Host factors involved in porcine reproductive and respiratory syndrome virus entry | Y Lee | Department of Animal, Dairy, and Veterinary Sciences, College of Agriculture and Applied Sciences, Utah State University |
| 50542 | NA PRRS Symposium | Microbiology | Poster | Medium chain fatty acids to reduce Porcine Reproductive Respiratory Syndrome Virus replication in MARC-145 cells | SA Crowder | Department of Animal Science Purdue University |
| 50546 | NA PRRS Symposium | Microbiology | Poster | In vivo characterization of an emerging PRRSV variant with novel -2/-1 PRF signal in nsp2 region | X Yan | Department of Pathobiology, University of Illinois Champaign-Urbana |
| 50303 | NA PRRS Symposium | Vaccines and Vaccinology | Poster | Oral vaccine delivery for porcine epidemic diarrhea virus | S Ramamoorthy | North Dakota State University |
| 50427 | NA PRRS Symposium | Vaccines and Vaccinology | Poster | A comparison of vaccine setback and viremia following Prime Pac [®] PRRS RR and Ingelvac [®] PRRS MLV vaccination | BK O'Brien | Merck Animal Health |